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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,918	12/20/2000	Ronaldus Maria Aarts	PHN 17,835	9606

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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BRIARCLIFF MANOR, NY 10510

EXAMINER

GRIER, LAURA A

ART UNIT

PAPER NUMBER

2644

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/741,918

Applicant(s)

AARTS ET AL.

Examiner

Laura A. Grier

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2644

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Ishino et al., U. S. Patent No. 5581651.

Regarding claim 8, Ishino et al. (herein, Ishino) discloses decoding a speech signal. Ishino's disclosure comprises a receiving a 1st plurality of coded audio signal in separate channels, each channel having a plurality of different frequency sub-band, combining the respective signals among a respect frequency sub-band, and synthesis filtering and decoding the combined signals (col. 3, lines 3-12 and 37-52).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Satoh.

Regarding claim 1, Satoh et al. (herein, Satoh) discloses a method for processing audio signals in a sub-band coding system. Figure 7 discloses a decoder receiving a plurality of coded audio signals in a plurality of channels, wherein the audio signal consist of a plurality of frequency sub-bands, wherein the frequency sub-bands of a particular frequency domain are combined. However, figure 7 fails to disclose the synthesis filtering for the combined signals. In figure 3, the decoders include synthesis filters. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of figure 7 by implementing a synthesis filter for the purpose of reproducing the audio signal of the respective subbands.

5. Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoh in view of AAPA.

Regarding claims 2-4, Satoh discloses a method for processing audio signals in a sub-band coding system. Figure 7 discloses a decoder receiving a plurality of coded audio signals in a plurality of channels, wherein the audio signal consist of a plurality of frequency sub-bands, wherein the frequency sub-bands of a particular frequency domain are combined. However, figure 7 fails to disclose the synthesis filtering for the combined signals. In figure 3, the decoders include synthesis filters. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of figure 7 by implementing a synthesis filter for the purpose of reproducing the audio signal of the respective subbands. However, Satoh fails to disclose respective filter means coupled in relation to the synthesis filter and/or sub-

combination circuits or between the input sub-channels and the sub-combination circuits

Regarding the filter means, AAPA discloses main-related filters or sound widening filter means (figure 1), wherein it obvious the filters can be position in varied location of an audio scheme.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Satoh by providing a filter means the in specific locations, respectively for the purpose of enhancing the sound of the input and/or processed signals.

Regarding claim 5, Satoh and AAPA discloses everything claimed as applied above (see claim 4). Filters may provide various performances to a signal. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Satoh and AAPA implementing a filter that alters components, such as adjusting a particular frequency, of a signal.

Regarding claim 6, Satoh and AAPA discloses everything claimed as applied above (see claim 2). Satoh and AAPA (AAPA) discloses a sound widening filter, which provides obviousness of providing virtual spatial widening.

Regarding claim 6, Satoh and AAPA discloses everything claimed as applied above (see claim 2). Satoh and AAPA disclose that various types of main related filters and sound widening filters may be used, such as equalization filters.

Response to Arguments

6. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

The applicant essentially argues that prior art rejection of Smyth et al. and Davision fail to disclose the claimed invention in respect to the sub-combination circuits. A new are rejection has been provided that discloses a plurality of code audio signals in respect audio channels, wherein the respect signals of the channels have different frequency and combined in respect the different frequency and being applied to a synthesis filter.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A. Grier whose telephone number is (571) 272-7518. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Laura A Grier
Primary Examiner
Art Unit 2644
October 31, 2005
